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ABSTRACT

An outline is presented of how "Interscript," a developing international communication system, operates. The three main elements in "Interscript" are described in turn, as follows: (1) the glyphs or symbols, which are pictographs, ideographs, arbitrary symbols, and generic symbols; (2) "Clearthink", or what would correspond to the identification of illocutionary force and idiomatic content and the subsequent expression of total meaning; and (3) the grammatical and semantic systems. The description of "Interscript" concludes with some suggestions of ways it might be useful in an ordinary foreign language classroom. An attachment provides illustrations of the symbols and categories used in the body of the presentation. (AMH)

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GRETTA SMITH MEMORIAL LECTURE

by

Frank E Bell OBE MA FIL

An Introduction to Interscript - an Experiment in International Communication and Language Learning

- Acknowledgements

Last year in Brighton, my distinguished predecessor as Gretta Smith Memorial Lecturer, Henry Widdowson, introduced his remarks by referring to Balni Barbi and the Academy of Lagado. How surprised Jonathan Swift would have been if he had known that at least three of the apparently crazy ideas of the Lagado so-called 'projectors' had a germ of sense in them, and are now being seriously pursued:

- the extraction of solar energy from plants
- the creation of Methane gas from refuse
- the construction of a universal language

It is the last that interests me today.

You may recall that in their desire to achieve international understanding the scholars abolished the use of words and replaced them by showing to each other the

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things which they represented, since the things so demonstrated were in daily use in similar shape among the speakers of different languages. Unfortunately the system had the disadvantage of requiring large rucksacks for the smaller objects and, for those who could afford it, muscular porters for the larger ones.

I like to think that Interscript is a hopefully somewhat less cumbersome twentieth century equivalent of this Lagado notion. Certainly no porters, no rucksacks even.

But the idea is <u>not</u> so dissimilar.

What, then, is Interscript?

Interscript is a system of non-phonetic symbols which can be printed or written by hand, covering both lexis and structure. Though potentially complete, within a strictly limited register, it is no finished product - very experimental rather - and it evolves continually in the light of experience and in particular of most encouraging international validation sessions.

Its usefulness is dependent on two main considerations:

a) the glyphs or symbols must be easy to draw without trained graphic skills, and easy both to read and to memorize.
b) The grammatical system must be <u>both</u> <u>easy</u> to follow and <u>seen</u> to be logical by people, again, without special linguistic training, and at the same time be within the grasp of the speakers of as many languages as possible.

The origin of Interscript can be traced to a very precise moment indeed - the ARELS Conference at the De Vere Hotel in London in April 1965, in the presence of, let me say, a person very special to this gathering - Gretta Smith herself. For it was on that particular occasion that I became more acutely conscious than I had ever been before, how difficult it is to ensure that a learner of a foreign

language understands completely, and without the possibility of doubt or ambiguity, the precise meaning of any group of words being presented to him. This conviction was sparked off by two consecutive talks. The first was a presentation of a new EFL Course Book, (I am fortunately unable to recall its name) which was illustrated by pictures which at best served as a vague reminder of the material that had been taught and at worst could be positively misleading. I remember one picture in particular, attractively drawn, of a woman leaning out of an upper window. I can't precisely remember which of the many sentences that such a situation might represent was in fact the correct one. Was it "Will you be home for tea?" or "Has the bus gone?" or "You've forgotten the key" or "Don't forget the Joneses are coming to dinner" or "Wait for me, I'm just coming", etc, etc, etc.

The lecturer who followed demonstrated certain teaching aids, which we now call hardware, including the then brand new overhead projector. He made most effective use of pin-men drawings and a wide variety of simple symbols to illustrate both his teaching points and the effectiveness of the equipment.

I found myself wondering whether the shortcomings of the first might be overcome by an expansion of the technique employed in the second talk: by the use of a system of clear symbols capable of only one interpretation.

To put it another way, could the same sort of tool that is of such benefit to arithmeticians and musicians, (from whatever country they come) be made available to language learners?

A few of us began to work on this idea.

It soon became clear to us, however, first that a semiotic system could be equally useful as a medium of limited register international communication in writing, between people who do not have a common language, and later, that it had considerable potentialities in two further spheres:

a) in a simplified form, as a kind of lead-in to literacy programmes and to the teaching of reading to retarded children and adults in any country. An idea of great promise.

b) In its full form - or maybe even an expanded one, a Mensa version - a means of studying and understanding more deeply the intricacies and peculiarities of one's own mother tongue.

It is difficult to describe within one hour work that has been going on over sixteen years. In any case it is not possible to learn Interscript in an hour, but I hope to give you a glimpse of how it operates.

There are three main elements in Interscript.

1 Clearthink

2 Grammar

3 Symbols

The symbols or glyphs are of sufficient number and complexity to reflect a degree of communicative competence corresponding to somewhere between the Waystage and Threshold Levels (of the Council of Europe's Language Project), in any language.

Next, grammar. While the majority of the glyphs stand for lexical items, Interscript, unlike several semiotic systems already in existence, has a developed and partly validated set of organisational principles or 'rules' analogous to the rules of 'grammar' proposed for natural languages. Through the combination of these two elements, Interscript can cover the full range of messages that might be exchanged by the speakers of any language up to the stage I've mentioned.

A necessary preliminary to putting these two into practice is the third element, Clearthink, and I will come back to this in a moment. First, I'll say a few things about the glyphs:

The Glyphs

There are four categories: **(please see pages 1 & 2 of the handout)**

a) Pictographs
These are limited to those objects and ideas which can be represented by a few simple lines.

b) Ideographs
In Interscript we understand by this term those glyphs, especially the key glyphs, which, though not pictographic in the strict sense of the word, are nevertheless easy both to remember and to use once they have been explained (rather like crossword clues). They are in fact often directly derived from pictographs.

(please observe numbers 15 & 16 of Category B which derive directly from 9 & 10 of Category A)

- (Explain)

Each key glyph gives rise to a large number of derivatives. This section has by far the largest number of symbols in the system.

c) Arbitrary symbols

There are inevitably some concepts for which a visual symbol does not readily suggest itself, for which glyphs have to be chosen pretty well at random. They are kept to a minimum and are in fact surprisingly few. Our validation experiments have served to show that the independent information content of most of these symbols is high enough to render memorisation more easy than we expected.

d) Generic symbols

There are a number of objects, whether picturable or not, or abstract concepts which cannot be easily differentiated. It is difficult to show visually the difference between a tomato and an apple, a daisy and a chrysanthemum, fear and hatred. These are represented by generic symbols, with the individual item identified by reference to a numbered code. Again these should be clearly limited to the smallest number possible. (No large dictionaries for our rucksacks!)

In all categories, glyphs can be either single or composite, in which case they are joined with a link mark.

As in most systems there are parts that are easy, and others less so. Examples of areas of Interscript which are beautifully, cosily, easy are pronouns, family relationships and expressions of time, as you can see from page 8.

(pages 3-7 contain further examples for more leisured study. Pages 4 & 5 are without the key so that you can see how many of the meanings you can guess - I think you may be surprised by how many you can guess correctly).

Next, with 1984 getting uncomfortably near, I must refer to the clearthink process (NOT doublethink or Newspeak - indeed their very opposite) - Clearthink - which, as I have said, is an essential preliminary to the use of Interscript.

What does this really mean? Clearthink has been defined as the identification, in natural language utterances, of illocutionary force and idiomatic content, (hidden purpose and metaphor) and the subsequent expression of 'total message meaning' in terms of communicative, syntactic and grammatical categories of Interscript.

In layman's terms - what does the message really mean? So, the Clearthink process (C/T) is needed to convert from the grammar and idiom of the mother tongue to the form from which the Interscript symbols can be drawn.

There are two stages of Clearthink:

the first is to work out the real meaning of the utterance, ie a form of conversion within L 1.

Now, I maintain that this is a very valuable exercise in its own right, even if it does not lead to a mastery of the Interscript system, or indeed even if it were to turn out that the full range of our ambitions for Interscript were to prove unachievable. The study and use of the Clearthink element in Interscript can provide valuable analytical training, such as used to be associated with classical learning now disappearing from our schools. It could be a useful part of the Theory of Knowledge Section in the current syllabus of the International Baccalaureate, and perhaps, more relevant today, help the inexperienced teacher to understand and recognise the pitfalls faced by the foreign learner in his own language.

I will refer to this again.

The second stage of Clearthink is to re-write this clarified meaning in the correct form for constructing Interscript sentences.

As an example of the first stage, let me give the sentence: "The play came off".

What does it mean? Strangely, it can either mean the play succeeded or it was a failure. We Clearthink this into what we really mean: 'The play was successful' or 'performances ceased'

In the phrase "my school" what does the word 'my' mean? Do I own it, or do I work there?

(I have given you a few examples on pages 9 & 10 of the handout)

(Select a few examples, including No 20)

The second process of Clearthink - re-writing the clarified meaning in the correct form for constructing an Interscript sentence is most logically dealt with under the heading Grammar, to which I now come.

The Grammatical System

You are probably aware that there are many thousands of symbols already in existence and in use for a great many different and varied purposes. If you doubt this, have a look at 'The Symbol Source Book' by Dreyfus. Most of these symbols, by the way, are in any case not suitable - graphically suitable - for a quickly handwritten system, though we use them where possible, with writability as the main criterion.

Furthermore, a great many glyphic codes have been proposed and a few of them published. A recent visit to the headquarters of UNESCO in Paris revealed that there are far more than I had ever imagined, but the official who deals with this area of work (whose name, by the way, translated into English means "God help me"!), told me that they all break down on structure - or rather, lack of structure. In this respect Interscript can claim to be different.

Absolutely central to the success of Interscript is the potential effectiveness of its syntactic and grammatical systems. What, then, briefly, are these systems?

The Categories of Interscript

The categories of Interscript are -

communicative
semantic
syntactic
glyphical or lexical
grammatical

The communicative categories are relevant to the first stage of Clearthink, which I've already mentioned.

Next come the semantic categories.

Semantic categories

Every 'simple sentence' in Interscript has three principal parts:

- a sentence type indicator (STI)
- a modality indicator (MI)
- the propositional content.

It is an absolutely central feature of Interscript that we separate out from the main propositional content, in a way not usual in natural languages,

both and the sentence type: statement, command, question,
and the modality, if any.

A schematic presentation of our system can be seen in the diagrams on pages 11, 12 and 13 of the handout. I will refer to them later. (These charts were prepared by a lover of cats).

Let us start at the top of the chart with the semantic categories.

First, I must refer to what we cann lollipops and noticeboards. All sentences in Interscript begin with one of each and sometimes more, followed in all cases immediately by the verb.

(Explain page 14 - pre-printed form)

On page 15 you will find a selection of the more obvious 'Sentence-Type Indicators' - the lollipops. They denote the basic type of sentence and do not relate to modality, and seem to us to be quite straightforward.

Modality in its turn is indicated by a symbol within the 'noticeboard' (MI) - the second sentence initiator.

So, I repeat, notions which in English are often shown by stress, intonation, inverted word order, or by phrasal verbs, are in Interscript isolated and brought to the beginning of the sentence. This is an essential feature.

(page 16 gives a selection of the more important Modality Indicators)

For our own satisfaction, if for no other reason, we have worked out a much fuller system both of Sentence-Type and Modality Indicators - way beyond the severely limited register to which Interscript must be restricted if it is to be widely used (Handout B).
(Run through page 16. Explain the logical categories within each of the four above: demonstrate the Z shape of the moving line).

It is perhaps easiest to show all of this by examples, which are to be found on pages 17-19 of the hand-out.
(Run through).

Having seen how in the semantic categories we isolate both sentence type and modality, we now turn to the rest of the sentence: the propositional content - divided into syntactic and grammatical categories, which serve to differentiate and relate its various components. Interscript analyses the propositional content of a sentence into the <u>syntactic</u> categories of:

- a predicator (something like a verb), accompanied by one or more
- primaries (noun or nominal phrases), and
- modifiers (adverbial phrases).

The next stage of the Clearthink process is to identify and isolate these elements.

Let us take an example:

"John gently patted the dog" (RSPCA, please note!)

- predicator : patted
- primaries : John, the dog
- modifier : gently

Interscript requires that these and the preceding categories be presented in a specific order:

STI - statement
MI - nil modality
predicator
primaries
modifiers

But it is not enough merely to put them in a special order (as it is, for example, in English or French) but to state how they relate to one another. These relationships are determined by our grammatical categories :

- time and aspect for the predicators
- case for the primaries and modifiers

All these categories are identified in the three charts.

a) The Time/Aspect System

All predicators (verbs) are denoted by a horizontal line over the symbol. Time and aspect are shown by a small number of variations to this line.
These are seen on page 20 and present no problems.

b) Cases

Every single glyph in Interscript which is not a verb has to be preceded by a case-role or similar marker - a kind of index doing the job that is usually achieved in natural languages by other devices such as word order, declensions or prepositions.

Page 21 gives a list of these as at present envisaged. they appear to us to accord quite closely with other thinking on case grammar, though there has been no final agreement among case grammarians on the correct number of essential cases.

Fillmore	1968	6 cases
Chafe	1970	7 "
Anderson	1971	4 "
Fillmore	1971	8-9 "
Cook	1977	5 "

Example: Take the engaging sentence:
"I'll hit him with a hammer after dinner"

I	:	agent
him	:	patient
hammer	:	instrument
dinner	:	time locative derivative after

So, I repeat, it is an absolute rule in Interscript that every single word in the propositional part of the sentence must reveal through one or more case-role markers its relationship to the other elements in the sentence. There are NO lexical glyphs in isolation.

That is, in brief outline, the system.

We are now in a position to look briefly at pages 22 to 25 to see how it operates.

(Run through page 22)

Page 23 is for you to try if you wish

(Run through page 24)

Similarly, page 25 is for you to try your hand.

Now let me turn to what may concern the teachers among us. How can Interscript be used in the classroom?

First, in the ideal situation in which both pupils and teacher have learned and are familiar with the complete system, its usefulness is potentially very great indeed.

Here I should clear up a frequent misunderstanding. The complete system of Interscript is learned through one's own mother tongue: it is <u>not</u> a new method of learning a foreign language or of teaching it - but an AID to both.

Where, however, pupils and teachers both know the system, it can be used as a glossing device for everything that is taught or learned at the early stages. It could be a kind of sub-title for all elementary courses, especially in teach-yourself manuals.

But that is an ideal and not likely to be achieved yet awhile.

Yet, if a teacher acquires a knowledge of the non-lexical glyphs (STIs, MIs, Time and Aspect for verbs and Case for nouns) these <u>can</u> be employed effectively ad hoc with the pupils learning their significance as they go along (rather as IPA is sometimes used and taught).

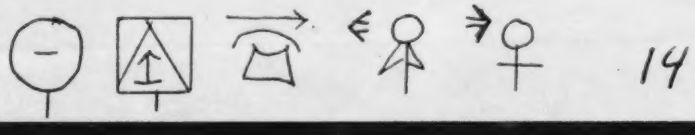
The purpose would be to 'disambiguate', to use a term better forgotten! A few lollipops and noticeboards permanently on the blackboard, rather as on the blank grid on page 14 of the handout, would be useful here.

Here are a few examples of what I mean:

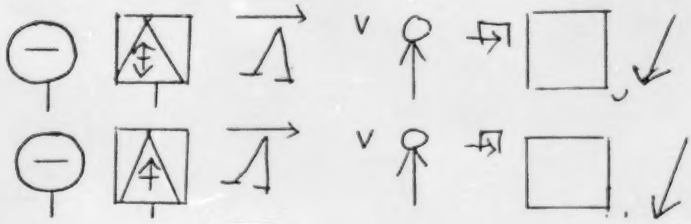
a) The four words "I should ring her" in bald print can mean either; there is an obligation for me to telephone her; or, I advise you to telephone her. This is shown by context and perhaps by stress in the spoken language.

(i) <u>I</u> should telephone her
(ii) <u>I</u> should telephone her (if I were you)

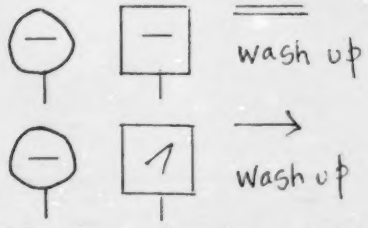
The difference is shown very clearly in Interscript.

(1) 

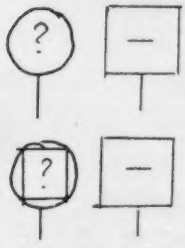
b) The common confusion between the two phrases 'mustn't' and 'needn't' can be very clearly shown: 'he mustn't come in' and 'he needn't come in'.



c) 'I am washing up'. the verb marker will show very clearly whether this means: 'I am now washing up and I cannot answer the telephone', or, ' I will do the washing up thank you very much, and you can jolly well mow the lawn'.



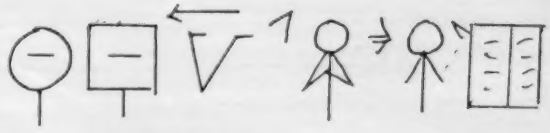
d) 'Can you lend me £5?' This can mean either: 'Have you got the money?' 'Are you able to lend it to me?, a question, or, 'Please, (polite request) lend me £5'.



.....and so on.....and so on.....with all the variant meanings of such modals as could, should, would, may, might, etc, etc.

Similarly, case markers can often remove confusions 'I gave him the book' will show :

agent : I
patient : book
goal : him



Specific examples are endless

There are, however, rather more general advantages of using Interscript in the classroom.

A. I feel sure there are quite a few teachers who regret the taboo on the use of translation in language teaching, who hanker after the precision that this method forces upon the learner. Much the same objective can be achieved by the use of Interscript, without the widely condemned reference to the learner's mother tongue.

B As I've already hinted, a relatively inexperienced teacher will find that Interscript can be of real help to him in monitoring his use of his own language in the classroom, in reducing an excessive use of idiom and bringing his language nearer the level of his pupils.

C Finally, Interscript can be of great benefit in that all too familiar situation of the highly intelligent student frustrated by his lack of knowledge of the language, who sees his fellow pupils forging ahead in the class because of their greater command of the language, although they may be less intelligent and experienced, who are the victims of the 'Beginners are stupid!' syndrome. Such pupils would, in my view get a much quicker and understanding grasp of Interscript than their fellows - which could serve as a compensation of real value for their other disadvantages.

Conclusion

Well, what do you think, if you can form a judgement after so inevitably inadequate a summary?

Is it a pipe-dream? A non-smoker's pipe-dream - or an idea of value and importance.

Is there any basis for our rather ambitious notion that it might serve as a kind of ISA (International Syntactic Alphabet) ie, a set of symbols having internationally agreed syntactic value, which could provide professional linguists with a metalanguage for the neutral discussion of syntactical problems, analogous to the role of the IPA for phoneticians?

There are formidable problems before the system can be brought into wide use. These includealong and careful series of international validations of many kinds, and a detailed programme of glyph design.

Even then, supposing the system can be perfected, there is the enormous problem of how to 'sell' it and provide the motivation for learning the system.

There are many parallels for such things: who wants to learn Esperanto? - to take all the trouble to learn it, comparatively easy though it is? Yet if it were widely used throughout the world the effort of learning it would be thoroughly worthwhile.

A kind of vicious circle applies to its adoption, and a virtuous circle to its use, once established.

There is at least one element in its favour. Though NOT a children's game, like all encoding and decoding processes, it is <u>fun</u> to operate - not all linguistic ideas can be so described.

If there are some of you who would like to pursue further the uses of Interscript, either as a medium of low register written communication or as a classroom aid, I shall be glad to arrange a study group over a weekend, at our new Study Centre at Attingham Park, near Shrewsbury, or elsewhere.

(Handout B).

INTERSCRIPT

1.

(PROPOSED) ~~FIFTH~~ FOURTH REVISED SENTENCE - TYPE INDICATORS

("Tropic" : STI : "I - Performative")

a. Category Types

STA Non-impingement - sentence not intended to affect reader's non-linguistic behaviour.

STB Non-deontic impingement - sentence intended to affect reader's non-linguistic behaviour, but without reference to ethical etc. codes.

STC Deontic impingement - sentence intended to affect reader's non-linguistic behaviour, with reference to ethical etc. codes.

b. Category Members

STA Non-Impingement

	MAJOR		MINOR	
STAI		State	STAI 1	Exclaim
STAII		Inquire	STAII 1	Inquire/Exclaim
			STAII 2	Request confirmation
STAIII		Wish		

STB Non-deontic impingement

STBI		Request	STBI 1	Beg
			STBI 2	Invite
STBII		Provoke		

INTERSCRIPT

1. (PROPOSED) ~~XXXX~~ FOURTH REVISED SENTENCE - TYPE INDICATORS (CONTD.)

STC Deontic Impingement

STCI		Oblige	STC IV		Waive
STCII		Advise	STC V		Warn
STCIII		Permit	STC VI		Prohibit

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2. (PROPOSED) THIRD REVISED MODALITY - INDICATORS

("Neustic" : MI)

a. Category Types

MA — Non-modal : corresponds to "Indicative Mood" in traditional grammar.

MB — Hypothetical : introduces "remoteness" or "non-reality" ; may combine with other modals.

MC — Personal-modal : expresses the "subject-specific" notions of ability and personal will.

MD — True modal : the state/process/activity of the predicator, or the sender's intellectual attitude towards it, is modulated by extrinsic factors, and perhaps further by the sender's subjective disposition, in one of four modal domains and in one of six degrees of modulation:

a. i. Modal Domains (glyphs to be "filled" by a. ii)

MDI Characteristic : the modality of inherent features or general truths.

MDII Peristatic : the modality of the effect of circumstances on the proposition.

MDIII Deontic : the modality of the effect of ethical/religious/legal/social considerations on the proposition.

MDIV Epistemic : the modality of the sender's inference concerning the degree of certainty with which the proposition may be asserted.

a.ii. Degrees of Modulation (glyphs to be inserted into a. i)

1		strong positive	4		weak negative
2		medium positive	5		medium negative
3		weak positive	6		strong negative

b. Category Members

MA Non-Modal

MAI Indicative

MB Hypothetical

MBI Remoteness, non-reality : contingent "should/would"

MC Personal-modal

MCI Acquired capacity : "can/be able to"

MCII Personal will : "will"

(MD True modal)

MDI Characteristic :

MDI. 1		"Constant"	MDI. 4		"Variable"
MDI. 2		Tendency	MDI. 5		Rarity
MDI. 3		Inherent Ability	MDI. 6		Inherent Inability

MDII Peristatic :

MDII. 1		Necessary if ...	MDII. 4		Not necessary if ..
MDII. 2		Advisable if ...	MDII. 5		Inadvisable if ..
MDII. 3		Possible if ...	MDII. 6		Out of the question if ..

MDIII Deontic :

MDIII.1		Mandatory	MDIII. 4		Optional
MDIII. 2		Decent	MDIII. 5		Not done
MDIII. 3		Permitted	MDIII. 6		Prohibited

MDIV Epistemic :

MDIV. 1		Inevitable	MDIV. 4		Arguable
MDIV. 2		Likely	MDIV. 5		Unlikely
MDIV. 3		Possible	MDIV. 6		Impossible